

DREMEL®

Shaper/Router Table

Owner's Manual

Model 5000231

HONESTLY NOW ... Have you read
this OWNER'S MANUAL?

Parlez-vous français?
Voir page 8

¿Habla español?
Vea página 14

- Safety
- Assembly
- Operation
- Service Parts



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Power Tool Safety Rules



WARNING

Read and understand all instructions. Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.

SAVE THESE INSTRUCTIONS


Work Area

Keep your work area clean and well lit. Cluttered benches and dark areas invite accidents.

Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Power tools create sparks which may ignite the dust or fumes.

Keep by-standers, children, and visitors away while operating a power tool. Distractions can cause you to lose control.

Electrical Safety

Double Insulated tools are equipped with a polarized plug (one blade is wider than the other.) This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way. Double Insulation  eliminates the need for the three wire grounded power cord and grounded power supply system. Before plugging in the tool, be certain the outlet voltage supplied is within the voltage marked on the nameplate. Do not use "AC only" rated tools with a DC power supply.

Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is grounded. If operating the power tool in damp locations is unavoidable, a Ground Fault Circuit Interrupter must be used to supply the power to your tool. Electrician's rubber gloves and footwear will further enhance your personal safety.

Don't expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.

Do not abuse the cord. Never use the cord to carry the tools or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.

When operating a power tool outside, use an outdoor extension cord marked "W-A" or "W." These cords are rated for outdoor use and reduce the risk of electric shock.

Personal Safety

Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.

Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts. Keep handles dry, clean and free from oil and grease.

Avoid accidental starting. Be sure switch is "OFF" before plugging in. Carrying tools with your finger on the switch or plugging in tools that have the switch "ON" invites accidents.

Remove adjusting keys or wrenches before turning the tool "ON". A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.

Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enables better control of the tool in unexpected situations.

Use safety equipment. Always wear eye protection. Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

Tool Use and Care

Use clamps or other practical way to secure and support the workpiece to a stable platform. Holding the work by hand or against your body is unstable and may lead to loss of control.

Do not force tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it is designed.

Do not use tool if switch does not turn it "ON" or "OFF". Any tool that cannot be controlled with the switch is dangerous and must be repaired.

Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.

Store idle tools out of reach of children and other untrained persons. Tools are dangerous in the hands of untrained users.

Maintain tools with care. Keep cutting tools sharp and clean. Properly maintained tools, with sharp cutting edges are less likely to bind and are easier to control. Any alteration or modification is a misuse and may result in a dangerous condition.

Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tools operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools. Develop a periodic maintenance schedule for your tool.

Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool, may become hazardous when used on another tool.

Service

Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury. For example: internal wires may be misplaced or pinched, safety guard return springs may be improperly mounted.

When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of electric shock or injury. Certain cleaning agents such as gasoline, carbon tetrachloride, ammonia, etc. may damage plastic parts.

Safety Rules for Router/Shaper Tables

Unplug tool before setting up in table, making adjustments or changing bits. Accidental start-up of the tool can cause injury.

Securely fasten table to a stable platform or workbench. During operation unstable platforms or workbenches may shift or tip causing loss of control and injury.

Securely fasten tool to table before operating. If tool loosens during operation it will tend to walk down from clamp and tool may fall while bit is still spinning.

Know how to shut off the tool! Position the tool under the table so that switch is readily accessible to quickly shut off in an emergency.

Route the cord away from the bit or cutting area. Cutting into live electrical wires may result in a shock, burn or electrocution.

Wear eye protection and dust mask. Use only in well-ventilated area. Using personal safety devices and working in safe environment reduces risk of injury.

Match the appropriate bit and its speed to your application. Do not use bits that have a cutting diameter that exceed the capacity of the tool. The shaper/router table is intended primarily for light duty use on wood. Overloading the tool can lead to personal injury or tool failure.

Never use dull or damaged bits. Sharp bits must be handled with care. Damaged bits can snap during use. Dull bits require more force to push the workpiece, possibly causing the bit to break.

Always make sure the workpiece is free from nails and other foreign objects. Cutting into a nail will damage the bit and can cause the workpiece to jump causing loss of control.

Use guard in all cutting applications except for sanding and certain rabbeting operations.

If any portion of the spinning bit is contacted injury will occur.

Use the adjustable fence in straight cutting applications. When routing along an entire edge of the work the fence and adjustable support wedge will help maintain stability and prevent forming concave shape or snipe on the edge.

Only piloted bits can be used without the fence. Piloted bits are used when routing internal and external contours on the workpiece. Piloted bits assist in maintaining control of the workpiece when the fence is not in use.

Never start the tool when the bit is engaged in the material. The bit cutting edge may grab the material causing loss of control of the workpiece.

Never place hands near the spinning bit. Use a push stick or fixture to guide small or thin workpieces when shaping/routing these pieces. Guiding the material with both hands, push sticks or fixtures is preferred to avoid contact with the spinning bit.

Feed the workpiece against the rotation of the bit. The bit rotates counter-clockwise as viewed from the top of table. Feeding the work in the wrong direction will cause the workpiece to climb up on the bit and may lead to loss of control during operation.

After changing the bits or making any adjustments, make sure the collet nut and any other adjustment devices are securely tightened. Loose adjustment device can unexpectedly shift, causing loss of control, loose rotating components will be violently thrown.

Never touch the bit during or immediately after the use. Contact with a spinning bit will cause injury and after use the bit is too hot to be touched by bare hands.

ATTACHMENT FOR USE WITH DREMEL ROTARY MODELS 275, 285, 395, AND 398

ATTENTION: Read entire instruction manual carefully before using your Dremel Shaper/Router Table. Retain instructions for future reference. This attachment will convert Dremel Corded Rotary Tools to a Shaper/Router Table for edge forming, routing, grooving, shaping, sanding edges, jointing, etc.

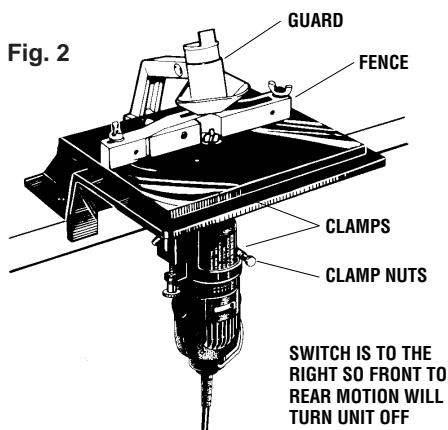
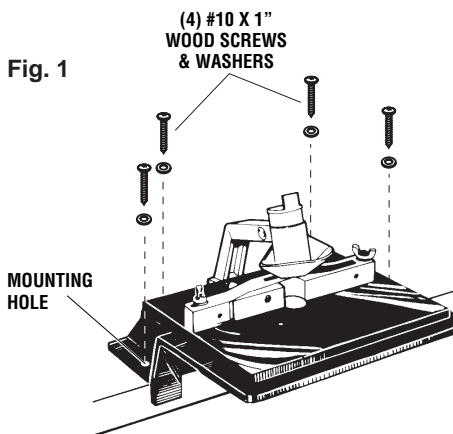
NOTE: Not for use with cordless rotary tools. Not for use in conjunction with the tile cutting bit, model 562.

Mount Table to Workbench

The **SHAPER/ROUTER TABLE** comes assembled ready to mount to the workbench. After determining table location, predrill the bench using a 1/8" diameter drill at the four **MOUNTING HOLE** locations. Secure table to the bench using the **(4) #10 x 1" WOOD SCREWS**, and **WASHERS**. (Included with the Shaper/Router Table). (See Fig. 1)

Install Rotary Tool to Table

1. Check the model number of your rotary tool and use the listing below to determine which bushing to use when adapting your tool to the Shaper/Router table.
2. Loosen the two **CLAMP NUTS** several turns. Insert the tool into both clamps then align the switch to the split in the clamps (**switch will be to the right — giving a front to rear motion for turning motor off**). Be sure nose is seated all the way in small clamp. Secure tool by tightening the two clamp nuts. (See Fig. 2 & 3)



ROTARY TOOL MODEL

BUSHING REQUIRED

275, 285, 395 (Type I, II, IV, V) USE: Black Bushings in small clamp.
398 Professional

Installing Router Bits

1. When installing router bits, be sure the power cord is unplugged, then remove the tool from the Shaper/Router Table. Fit the **ROUTER BIT SHANK** into the collet allowing a maximum of 5/8" to protrude past the collet nut. Use the spindle lock and wrench to secure the bit. **(See Fig. 3)**
2. Loosen the **WING NUT** on **HEIGHT STAND** and turn the **DEPTH ADJUSTING SCREW** to set cutting depth. Depth of cut will be the amount the bit extends above the **SHAPER/ROUTER TABLE**. After setting cutting depth, retighten wing nut.

Cutting Depth Adjustment

Adjustment markings on the back of adjusting bracket are marked in inches and millimeters. Each line on the fractional side represents 1/16 of an inch. Each line on the metric side represents one millimeter. View the markings prior to starting your project. Loosen the clamp knob and turn the adjusting screw counterclockwise (lowering the adjusting bracket), set to desired depth and tighten clamp knob. To insure proper settings, rout and measure cut on scrap material.

Router Feed Direction

The router spindle turns in a counter clockwise direction when viewed from above the table. For best control and quality of cut, feed the work into the bit in the direction that the bit will tend to pull the work to the fence. (Incorrect feed direction will result in the bit trying to pull the wood thru faster than you want.) Feed the workpiece from right to left as shown. Feed direction is extremely important when using a pilot bit freehand on the edge of a workpiece as well as when using the fence with all bits. **(See Fig. 4)**

Fig. 3

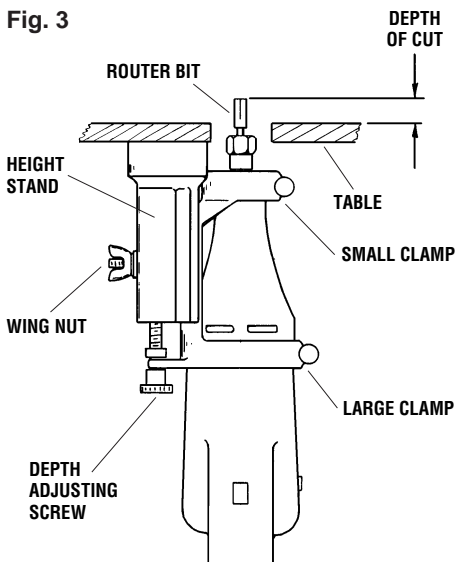
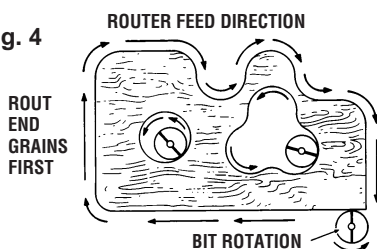
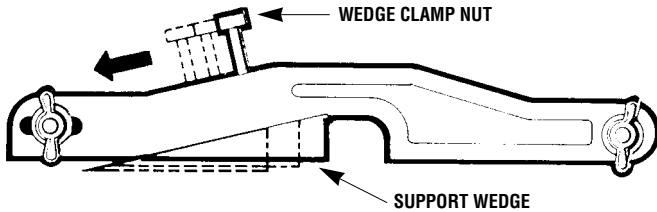


Fig. 4



Feed directions for outside and inside routing. Note the sequence of the cuts for routing around all four edges of a rectangle or square board.

Fig. 5



Routing Using the Fence

1. Unplug the rotary tool before making any fence adjustments or bit changes. Feed the work against the rotation of the bit as shown. Most fence cutting is done with the **SUPPORT WEDGE** adjusted to the right, where it is in line with the fence. (See Fig. 5)
2. **CENTER CYLINDER** of the **GUARD** can be adjusted up when making cuts using the fence. Loosen **THUMB NUT**, lift the cylinder up and secure by tightening thumb nut. (See Fig. 6)
3. When shaping small pieces or when finishing the cut on narrow, long pieces, use a **PUSH STICK**. Use 1/4" x 2" x 8" piece of lumber notched as shown to make this push stick. (As shown) It will enable you to keep your hands away from the cutting area.
4. To cut a straight groove, use 5000650 (1/8") or 5000654 (1/4"). Install the bit and set the depth of cut using adjusting screw as shown in Fig. 3. Loosen **WING NUT** on left end of fence and swing fence assembly to proper distance from bit to give desired groove location. Retighten wing nut. Take a trial cut on scrap lumber to check depth and location of groove.
5. When trimming the entire edge of a workpiece, adjust the **SUPPORT WEDGE** for support of the workpiece on the left side of the cutter. First, adjust the fence to control the amount of cut. Take a trial cut of about 2" long and check the amount of cut. Turn rotary tool off. Loosen **WEDGE CLAMP NUT** and slide wedge to left until wedge contacts workpiece. Retighten clamp nut to secure wedge to fence. Workpiece will not have support on both sides of the cutter. (See Fig. 5)

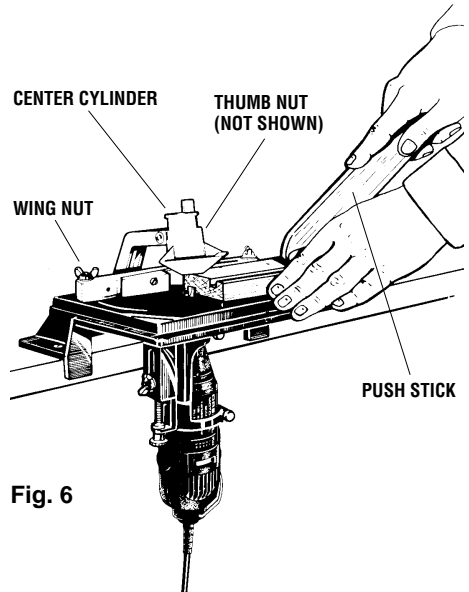
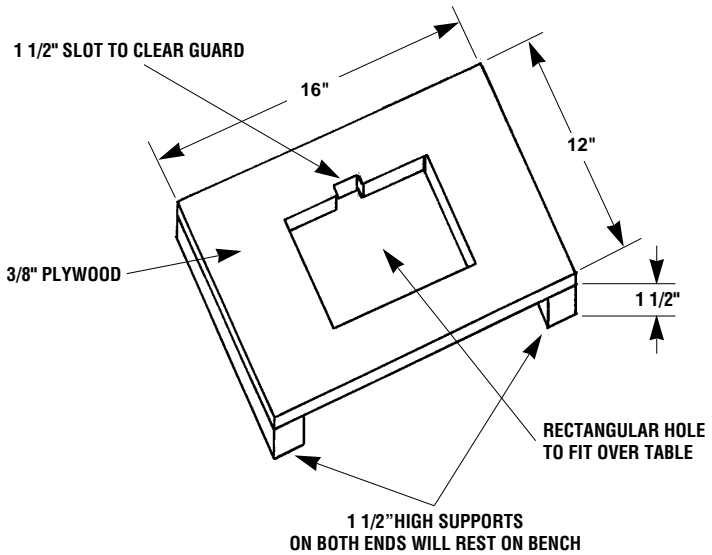


Fig. 6

Fig. 7



Routing Using Pilot Bits

1. When bits with pilots are to be used (such as 5000612 or 5000615), move the fence back only enough to allow the amount of cut to be made. Keeping the fence close to the bit allows the fence to serve as a rear guard. In special cases when the fence must be removed from the table, adjust the center sleeve of the guard down the rear bit protection.
2. Only piloted bits can be used without the fence. If the workpiece being cut is between the cutter and the operator, then feed from right to left. If the cutter is between the operator and the workpiece being cut, feed from left to right.
3. Feed the workpiece past the cutter without stopping, with a consistent speed. A change in feed or a dwell will cause an irregular cut.

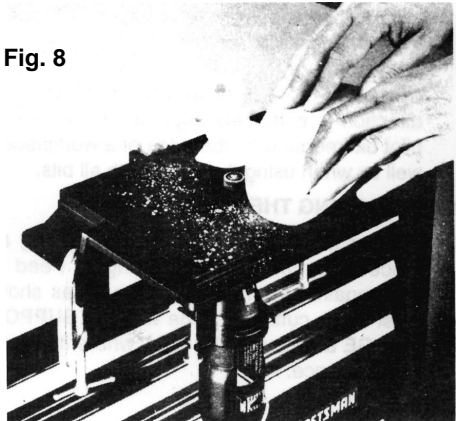
Expanded Table Work Surface

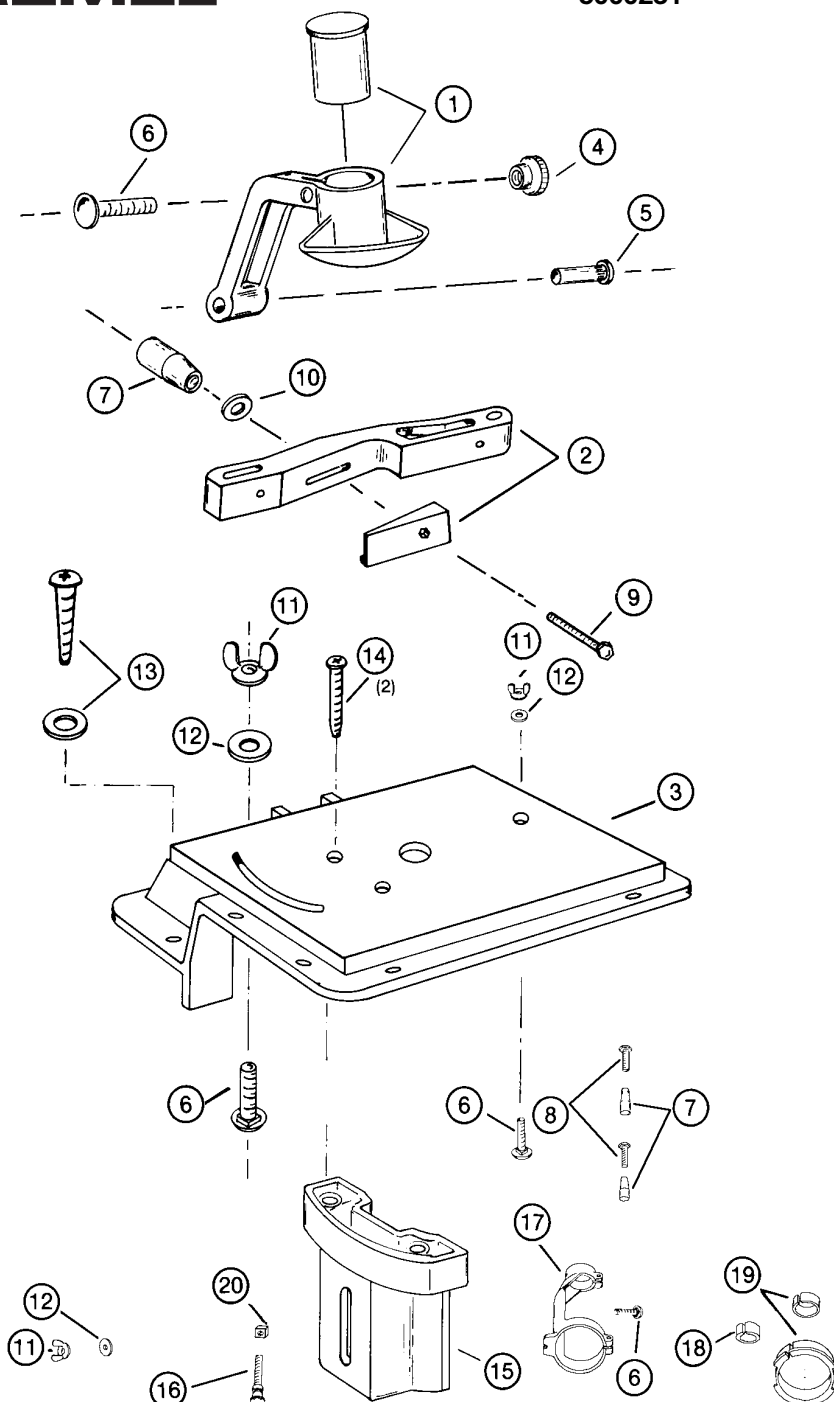
The shaper/router table is designed to make it easy to expand the size of the working surface. Use 3/8" thick solid core plywood. Cut a rectangular hole in the plywood to fit over the table and secure using (8) #10 wood screws, 1/2" in length. Support the table at both ends by securing 1 1/2" high lumber supports to the plywood base. (See Fig. 7)

Drum Sanding

The Shaper/Router Table is also ideal for drum sanding irregular shaped parts as shown. Use Drum Sander 5000407 (1/2") or 5000430 (1/4"), with or without the fence assembly. (See Fig. 8)

Fig. 8





ORDER BY PART NUMBER, NOT CODE NUMBER

CODE NO.	PART NO.	DESCRIPTION
01	2615296101	Guard & Sleeve
02	2615296100	Fence & Wedge
03	2615294998	Shaper Table
04		*Thumb Nut
05	2615294999	Guard & Pin
06	2615294956	*Adjustable Bracket Clamp Screw 4 Req'd
07	2615294223	Clamp Screw Nut #6-32 3 Req'd
08	2615294205	*Clamp Screw #6-32 x 3/4" 2 Req'd
09	2615296105	*Wedge Clamp Screw #6-32 x 1-1/4"
10		*Clamp Rivet Burr #9
11	2615294959	Clamp Screw Wing Nut 3 Req'd
12	2615294227	*3/16" Rivet Burr 3 Req'd
13	2615296106	Shaper Mounting Screw
14	2615294960	Housing Screw #8 x 15/16 2 Req'd
15	2615294951	Holder Adj. Bracket
16	2615294953	Depth Adj. Screw
17	2615294952	Tool Holder
18	2615297216	Type 1, 4 and 5 Nose Bushing
19	2615294962	Small Body Bushing Set
20	2615294964	*Top Plate Nut

WRITE FOR CURRENT PRICES

NO C.O.D.'S